

Photometric Test Report



ECLEXPOFL300VW

300W asymeric LED floodlight,with
Variable White CCT 2,700K – 6,500K

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TESTING PROCESS

Prolights has its own optical testing laboratory in order to provide accurate photometric reports for its lighting products. The testing laboratory contains certain variety of precise lighting measurement systems that ensure an optimal reading of all the characteristic parameters of the lighting devices. All measurements are made at a controlled room temperature of 20°C without any external light sources. This photometric report is obtained through the data measured by a high precision measurement system and analyzed by a dedicate software.

Prolights measurement instrument

Prolights measurement instrument is a complete measurement system for any light source. It's equipped with two-axis goniometer, that enables to measure the full 3D distribution field of the light source. This instrument measures the light intensity, the beam angle and the most significative colors parameters, like color temperature, spectral distribution, CRI, CQS, TM-30 with a very high accuracy rate.

Please Note: All measurements are made with light source at operating temperature. Before starting the measurement, the instrument analyzes the process of the light source during the heating phase. The measuring process of all the parameters begins only when the light emission is stable, that is with a variation of less than 0.5% in a 15 minutes time frame.

Prolights measurement software

The software provides user friendly interface for the operator who does the measurements, and it also analyzes and processes all the collected data by the instrument. With this software it is possible to see the measured data in real-time and it is possible to examine all the measured data and graphics afterwards as well. All information is collected in a specific Prolights template, and the software creates also IES and LDT files, which are widely used to transfer the photometric data, and to develop lighting system.

Additionally, the fixtures are rechecked using various hand-held instruments like Sekonic C-700 and Gossen Mavospec Base, this is done to ensure, that the data in the photometric report are as accurate as possible.



Total lumen output:

13044 lm

Peak candela output:

10006 cd

Light quality:

CRI: 94,9

Color temperature:

4005 K

PRODUCT NAME:

ECLEXPFL300VW

MEASURAMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

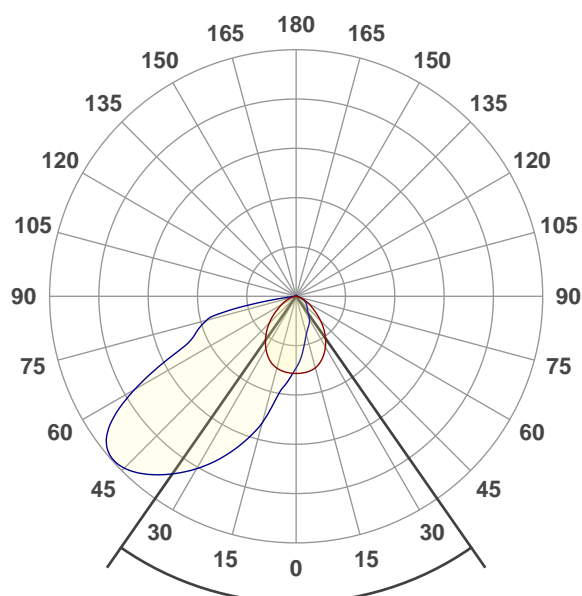
Full On

Operator:

Paolo Carvone

Date and time:

17/12/2020 11:43:50

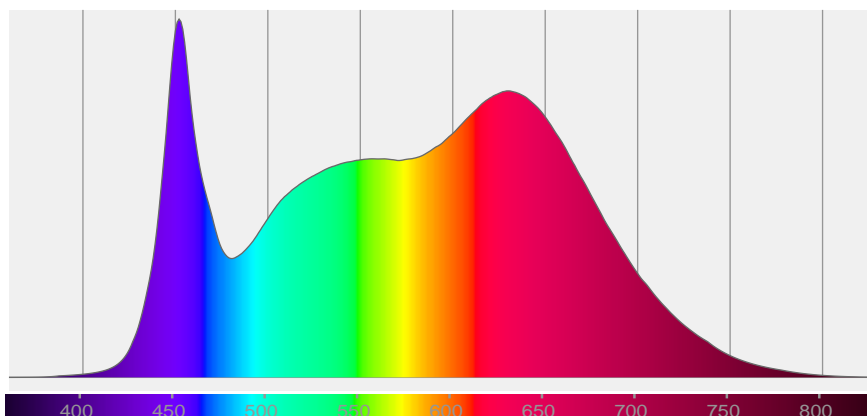


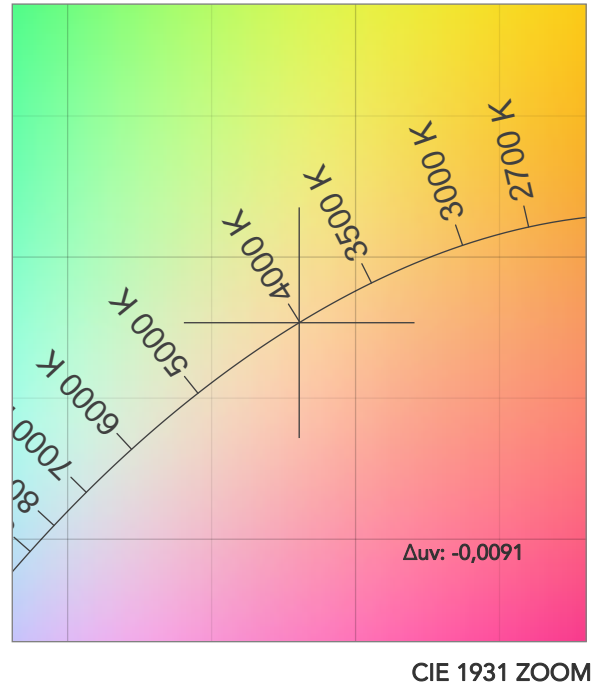
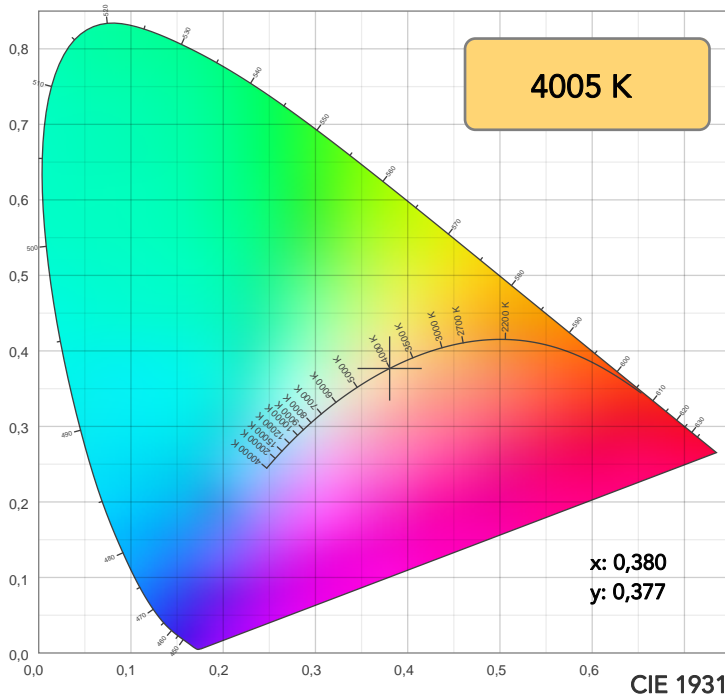
Beam angle 50%: 69,8°

Field angle 10%: 126,1°

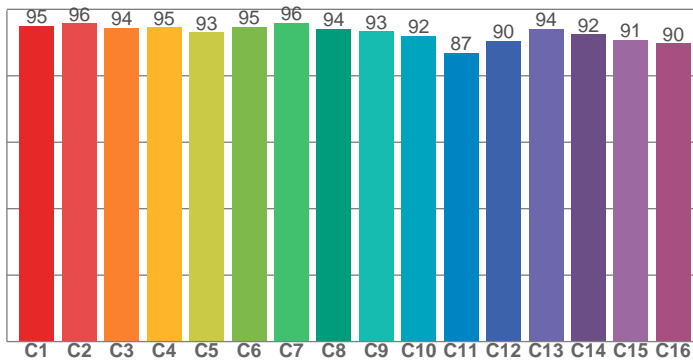
Cut off angle 2.5%: 155,5°

Spectra

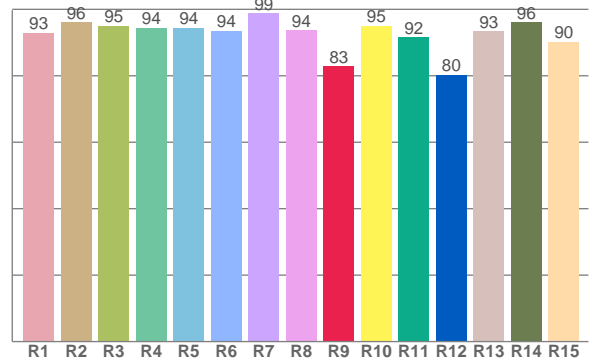




TM30: 92,9



CRI: 94,9 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93,0	96,1	95,0	94,5	94,4	93,6	98,7	93,7	82,8	95,0	91,5	80,3	93,4	96,2	90,3

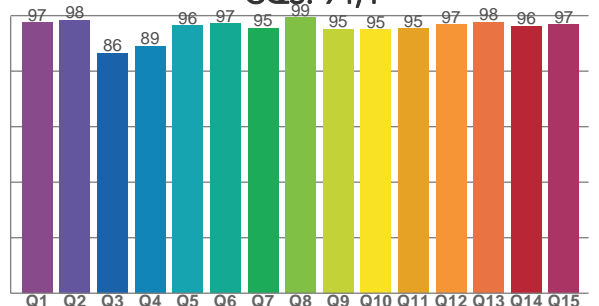
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,0	95,8	94,4	94,5	93,1	94,7	95,9	94,1	93,4	91,9	86,9	90,5	94,1	92,5	90,9	89,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,5	98,4	86,5	89,0	96,4	97,1	95,4	99,3	95,2	95,0	95,4	96,7	97,6	96,2	96,8

CQS: 94,4



COLOR PARAMETERS

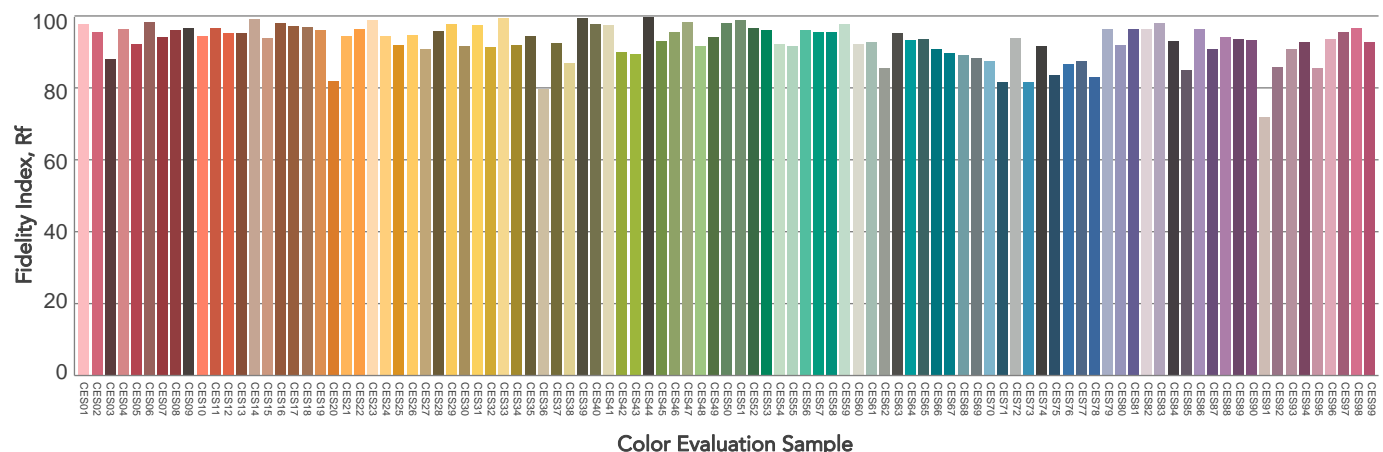
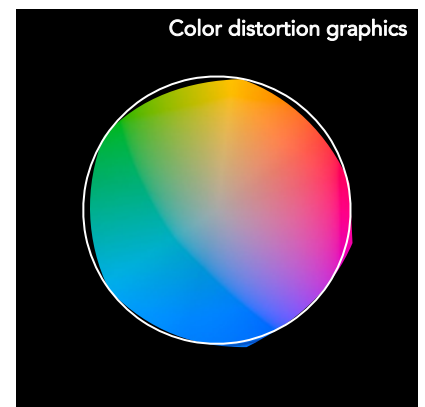
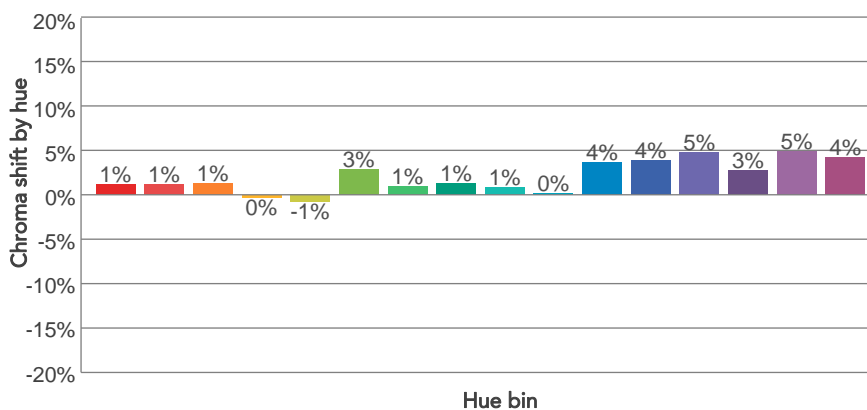
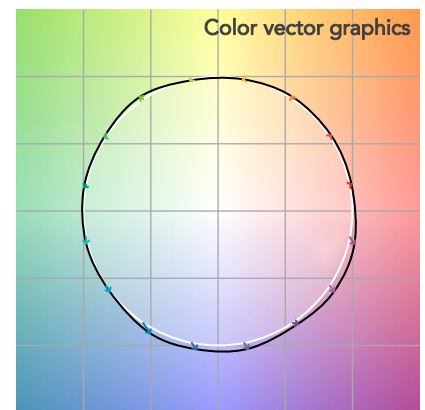
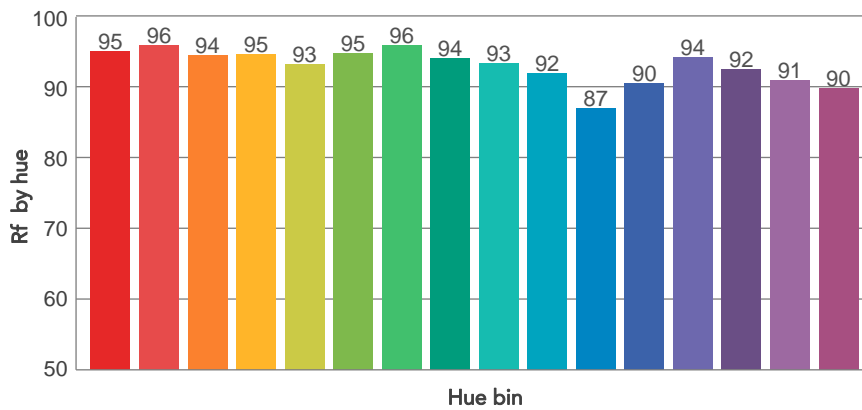
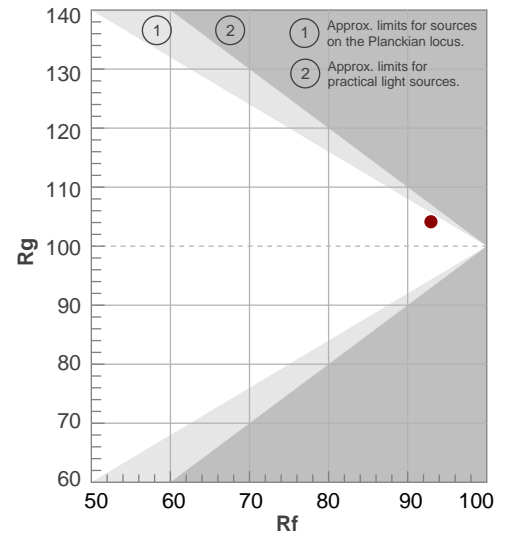
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4005 K	94,9	82,8	92,9	104,1	94,4	97	0,380	0,377	-0,0091

TM30 DETAILS

Rf 92,9
Fidelity index Rf

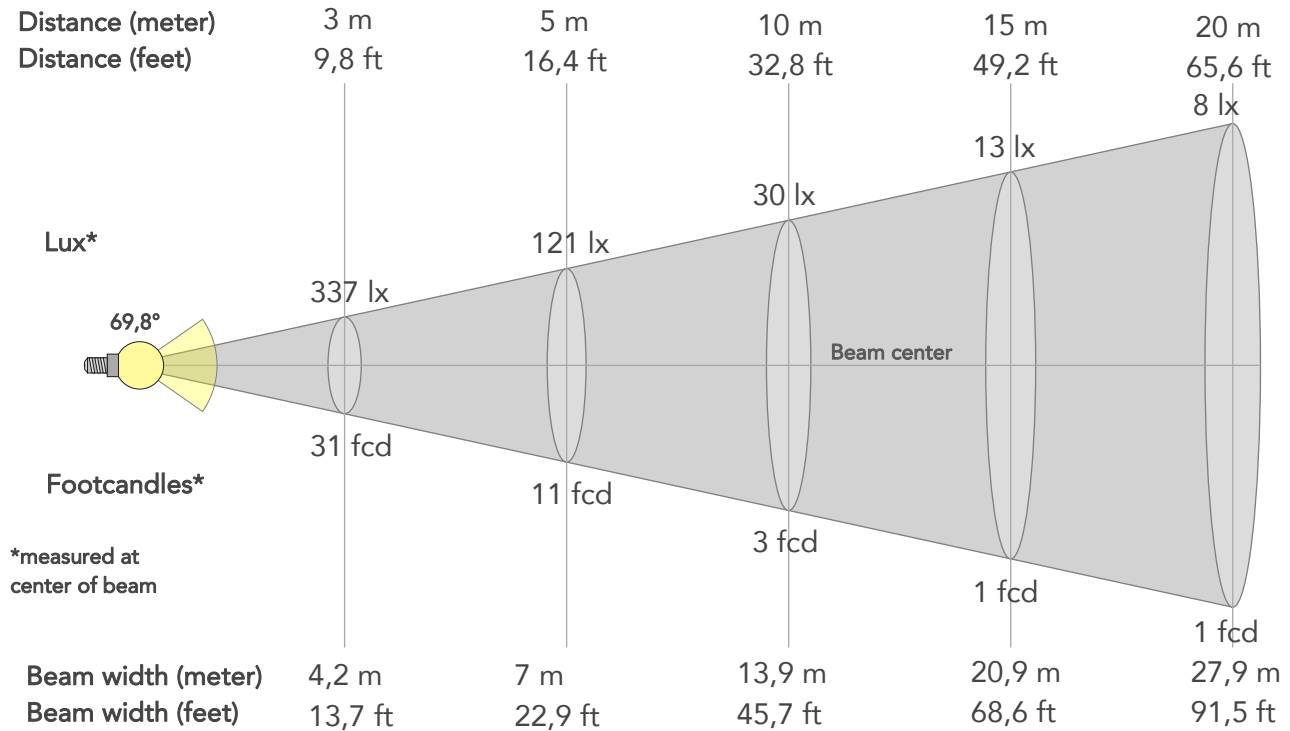
Rg 104,1
Gammut index

		Graphic shifts (%)	
Hue Bin	R _f	Chroma	Hue
1	95	1%	0%
2	96	1%	0%
3	94	1%	2%
4	95	0%	1%
5	93	-1%	1%
6	95	3%	1%
7	96	1%	1%
8	94	1%	2%
9	93	1%	5%
10	92	0%	5%
11	87	4%	8%
12	90	4%	4%
13	94	5%	2%
14	92	3%	3%
15	91	5%	-2%
16	90	4%	-4%



BEAM DETAILS

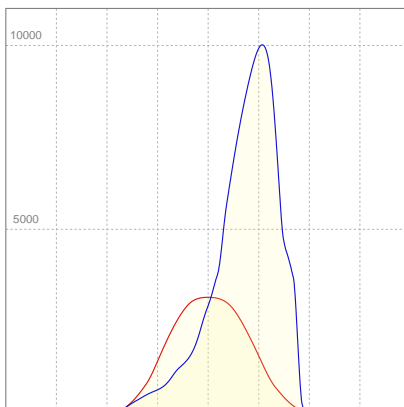
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
69,8°	126,1°	155,5°	77,9%	48,2%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	3037lx	759lx	337lx	190lx	121lx	54lx	30lx	13lx	8lx	5lx	3lx	2lx	1lx
Footcand.	282fcd	71fcd	31fcd	18fcd	11fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,8m	4,2m	5,6m	7m	10,5m	13,9m	20,9m	27,9m	34,9m	41,8m	55,8m	69,7m
Beam wid.	4,6ft	9,2ft	13,7ft	18,3ft	22,9ft	34,3ft	45,7ft	68,6ft	91,5ft	114,3ft	137,2ft	182,9ft	228,6ft

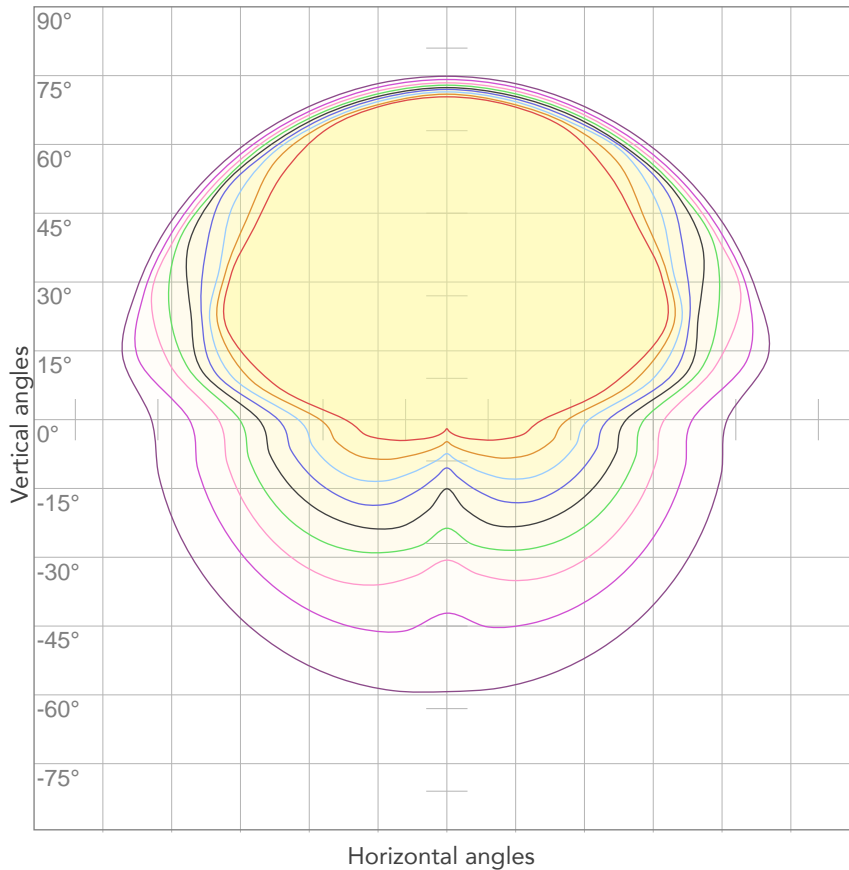
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	1,38A	298,9W	44lm/W
Power FC			
0,97			

ISO CANDELA DIAGRAM



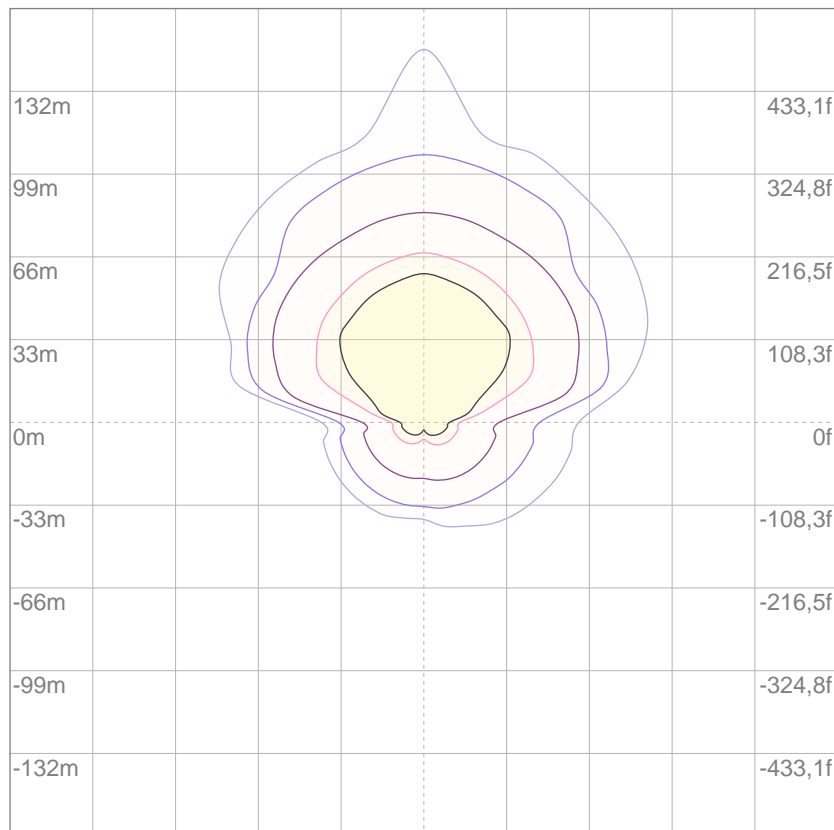
10%	304 cd
20%	607 cd
30%	911 cd
40%	1215 cd
50%	1519 cd
60%	1822 cd
70%	2126 cd
80%	2430 cd

Conditions:

Number of c-planes: 4

Candela at center: 3037 cd

ISO LUX DIAGRAM



3%	0,911 lx
5%	1,52 lx
10%	3,04 lx
30%	9,11 lx
50%	15,2 lx

Conditions:

Number of c-planes: 4

Lux at center: 30,4 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

10877 lm

Peak candela output:

8354 cd

Light quality:

CRI: 95,6

Color temperature:

6522 K

PRODUCT NAME:

ECLEXPFL300VW

MEASURAMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

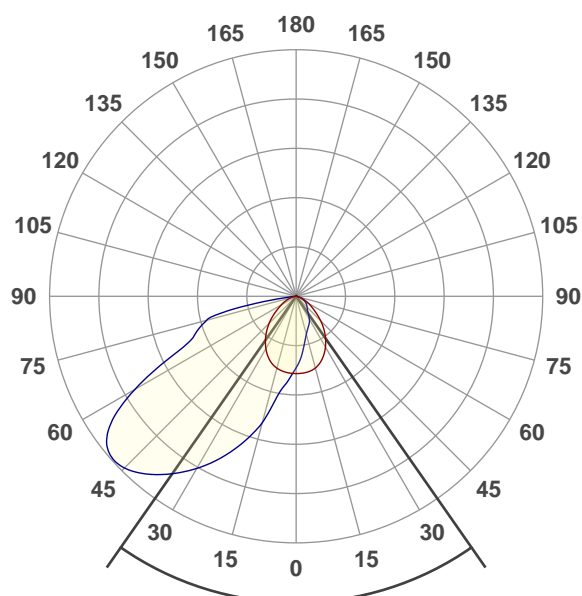
Cold White

Operator:

Paolo Carvone

Date and time:

17/12/2020 11:46:46

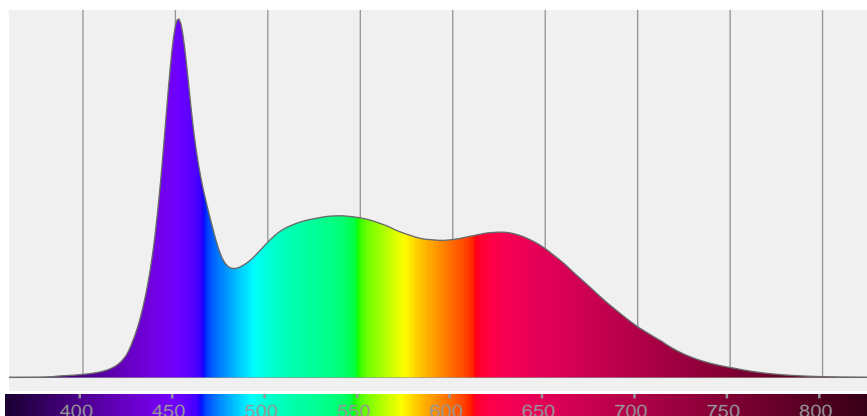


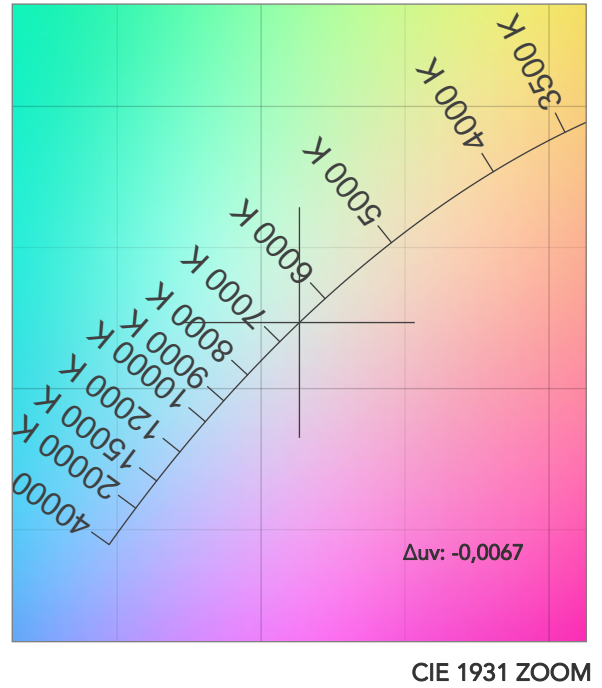
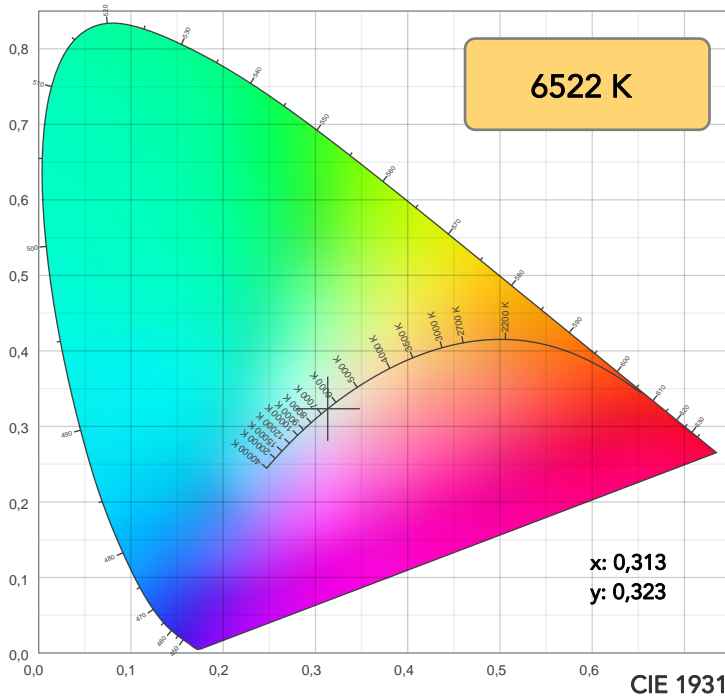
Beam angle 50%: 69,8°

Field angle 10%: 126°

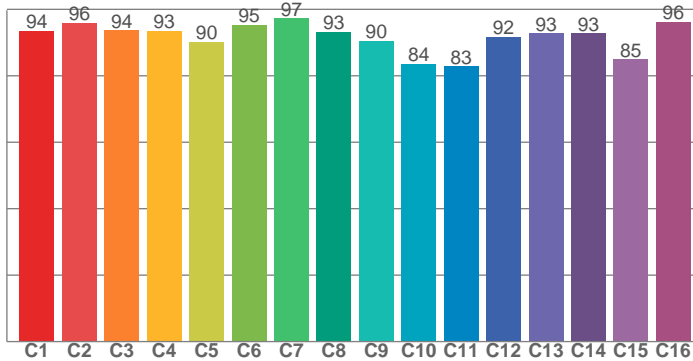
Cut off angle 2.5%: 155,4°

Spectra

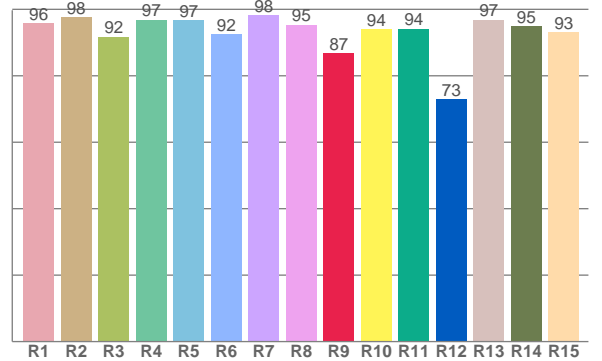




TM30: 91,6



CRI: 95,6 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,7	97,7	91,8	96,8	96,7	92,5	98,1	95,4	86,7	94,0	94,1	72,9	96,9	94,9	93,1

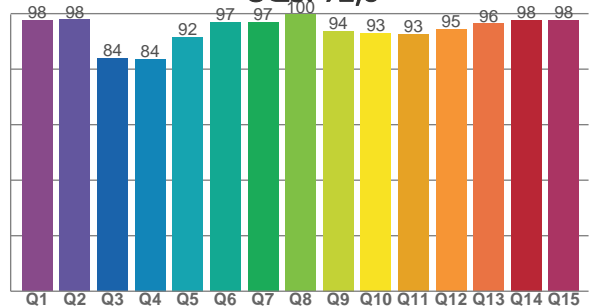
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,6	95,9	93,7	93,4	90,2	95,4	97,3	93,3	90,5	83,7	82,9	91,8	92,8	92,7	85,0	96,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,6	97,9	83,9	83,6	91,6	96,9	96,9	99,7	93,7	93,1	92,7	94,5	96,4	97,6	97,6

CQS: 92,6



COLOR PARAMETERS

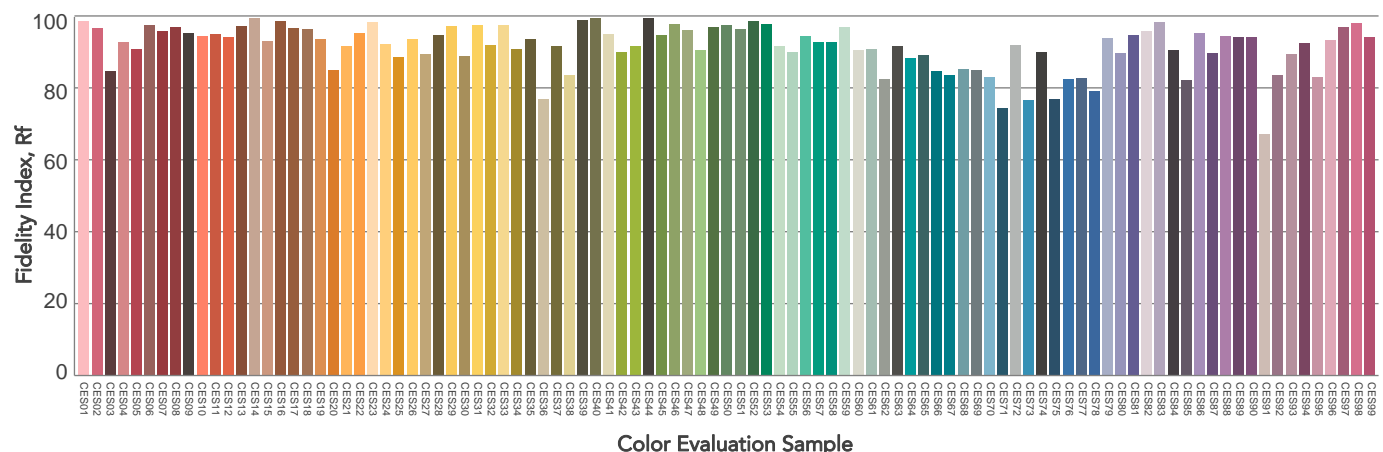
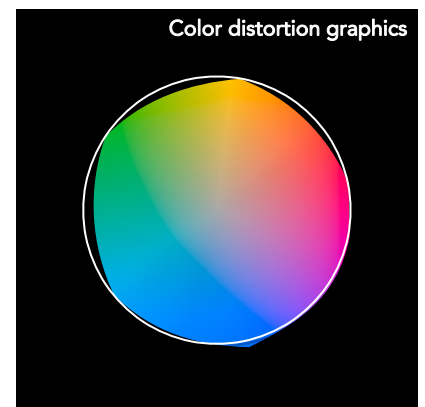
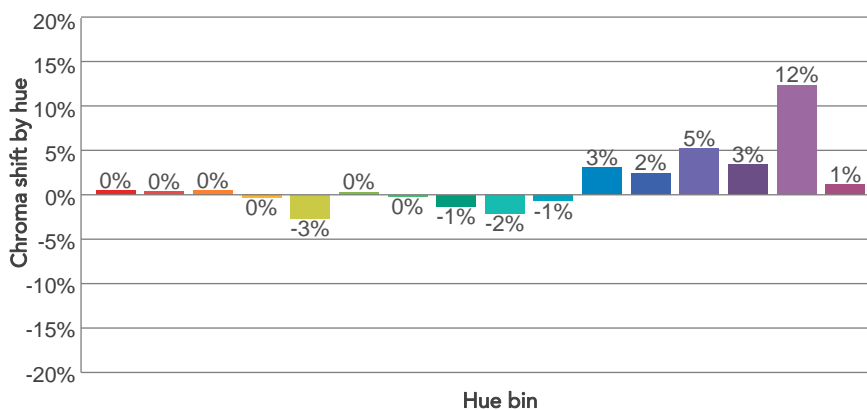
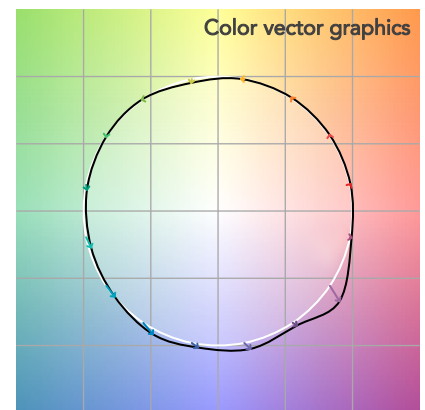
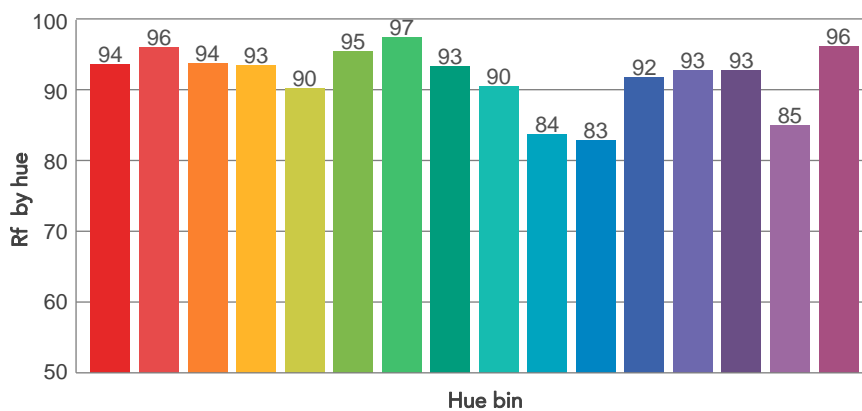
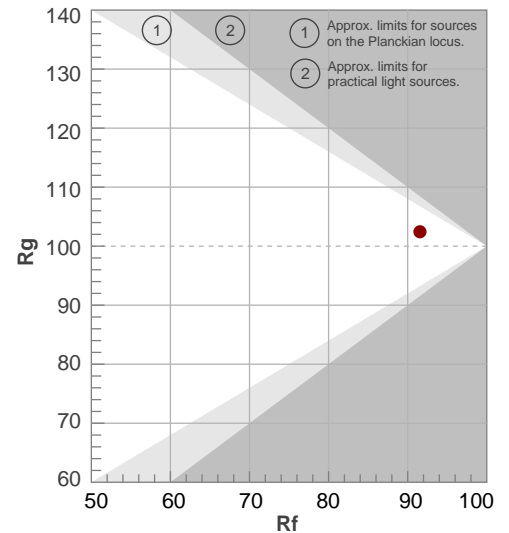
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6522 K	95,6	86,7	91,6	102,4	92,6	97	0,313	0,323	-0,0067

TM30 DETAILS

Rf 91,6
Fidelity index Rf

Rg 102,4
Gammut index

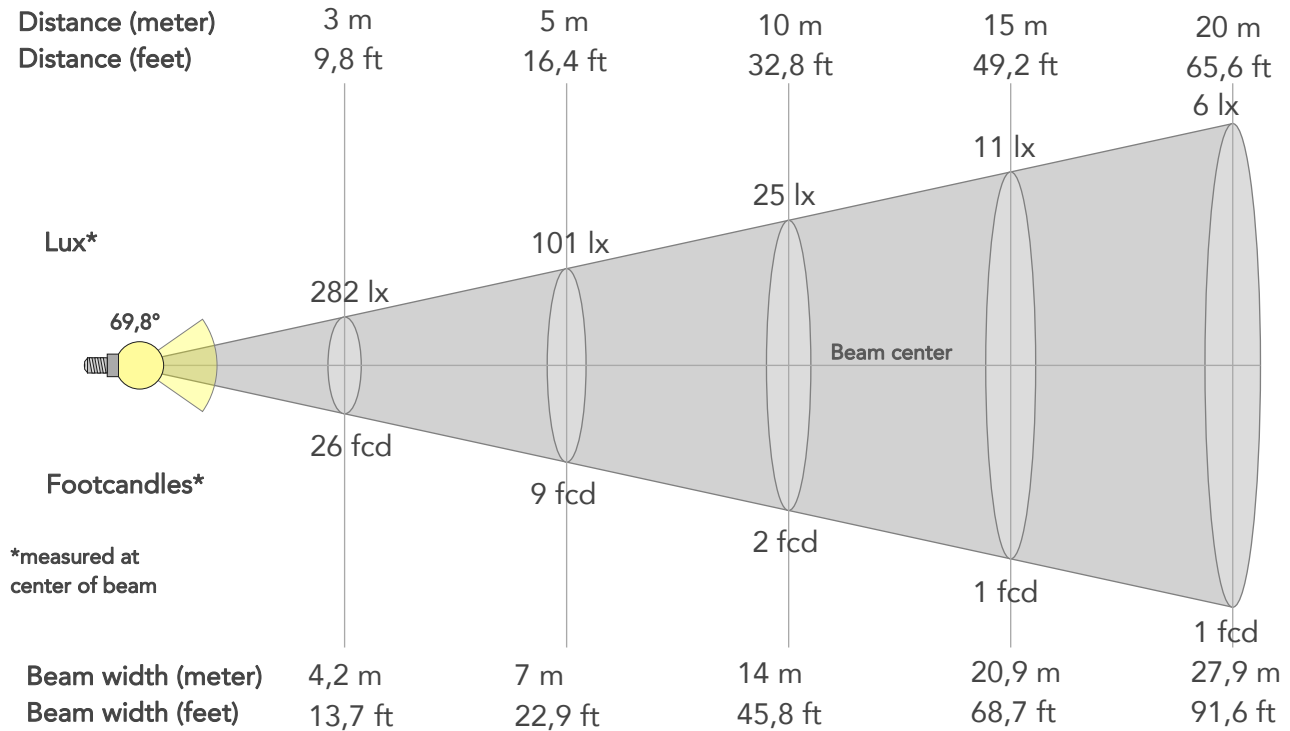
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	94	0%	1%
2	96	0%	1%
3	94	0%	2%
4	93	0%	2%
5	90	-3%	1%
6	95	0%	1%
7	97	0%	0%
8	93	-1%	4%
9	90	-2%	8%
10	84	-1%	10%
11	83	3%	10%
12	92	2%	5%
13	93	5%	4%
14	93	3%	2%
15	85	12%	-6%
16	96	1%	0%



BEAM DETAILS



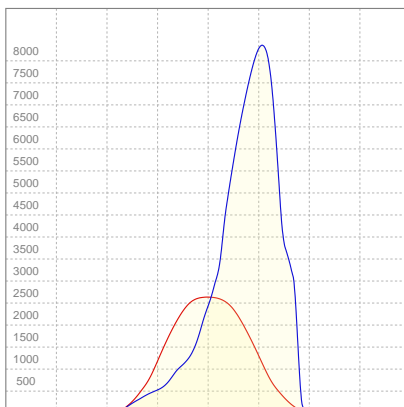
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
69,8°	126°	155,4°	78,0%	48,2%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	2536lx	634lx	282lx	158lx	101lx	45lx	25lx	11lx	6lx	4lx	3lx	2lx	1lx
Footcand.	236fcd	59fcd	26fcd	15fcd	9fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,8m	4,2m	5,6m	7m	10,5m	14m	20,9m	27,9m	34,9m	41,9m	55,9m	69,8m
Beam wid.	4,6ft	9,2ft	13,7ft	18,3ft	22,9ft	34,4ft	45,8ft	68,7ft	91,6ft	114,5ft	137,4ft	183,2ft	229ft

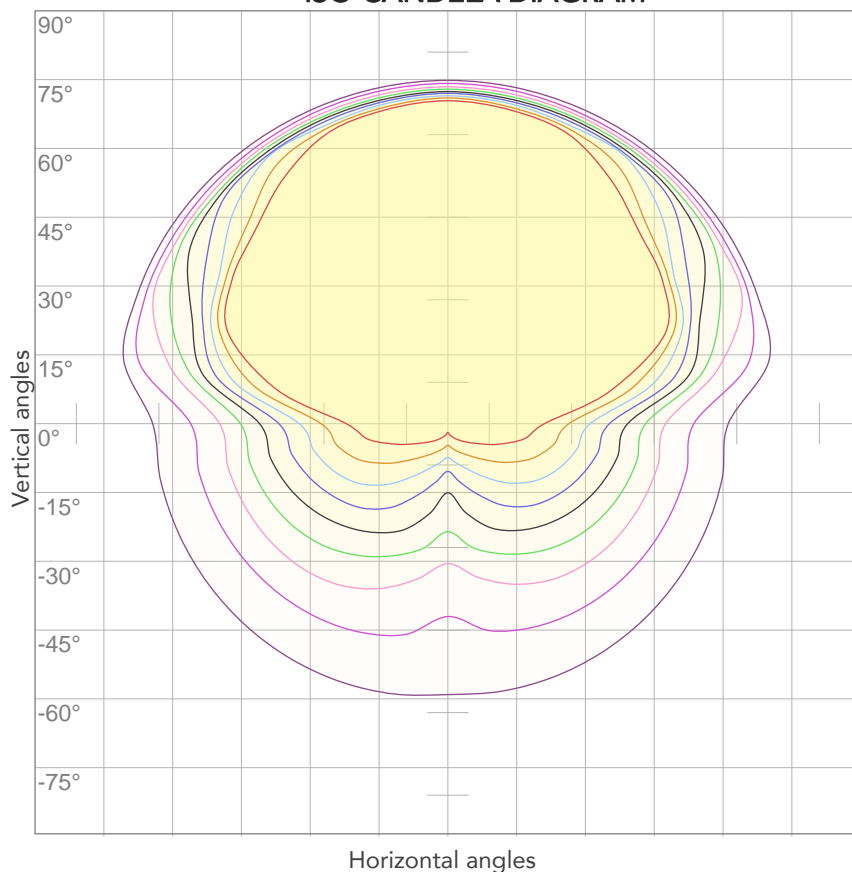
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,963A	203,5W	53lm/W
Power FC			
0,97			

ISO CANDELA DIAGRAM



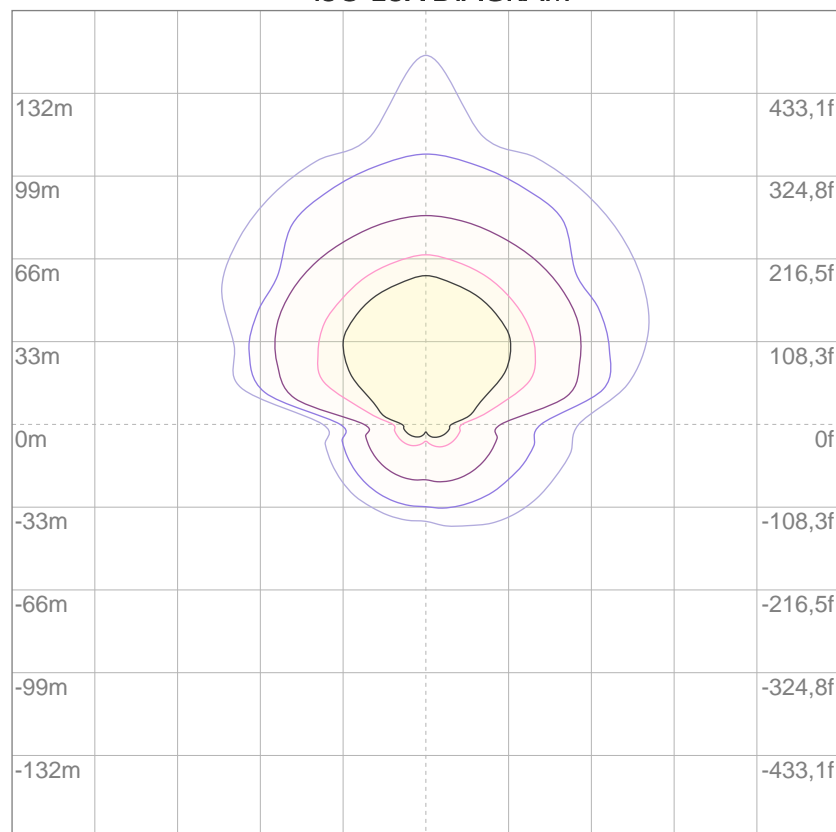
10%	254 cd
20%	507 cd
30%	761 cd
40%	1014 cd
50%	1268 cd
60%	1521 cd
70%	1775 cd
80%	2028 cd

Conditions:

Number of c-planes: 4

Candela at center: 2536 cd

ISO LUX DIAGRAM



3%	0,761 lx
5%	1,27 lx
10%	2,54 lx
30%	7,61 lx
50%	12,7 lx

Conditions:

Number of c-planes: 4

Lux at center: 25,4 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.



Total lumen output:

7690 lm

Peak candela output:

5900 cd

Light quality:

CRI: 97,7

Color temperature:

2669 K

PRODUCT NAME:

ECLEXPFL300VW

MEASURAMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

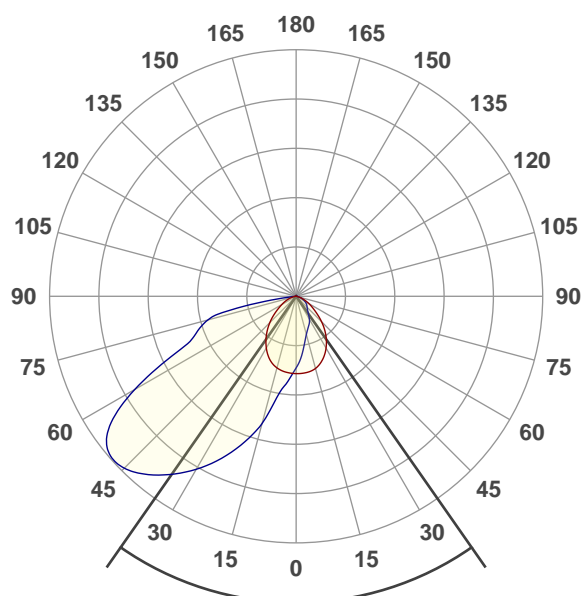
Warm White

Operator:

Paolo Carvone

Date and time:

17/12/2020 11:53:01

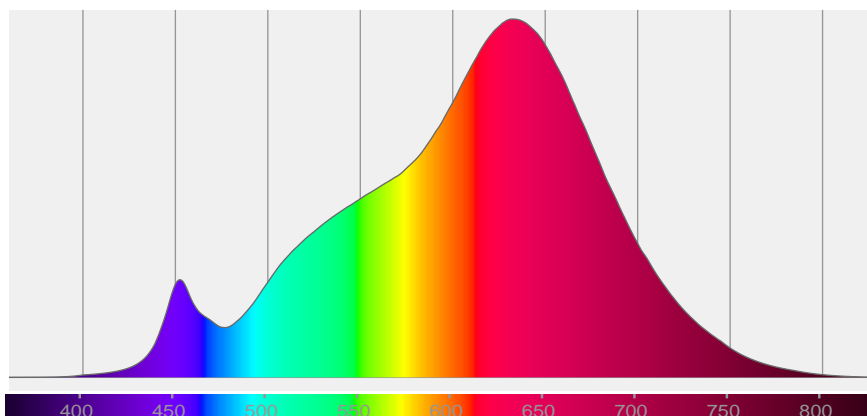


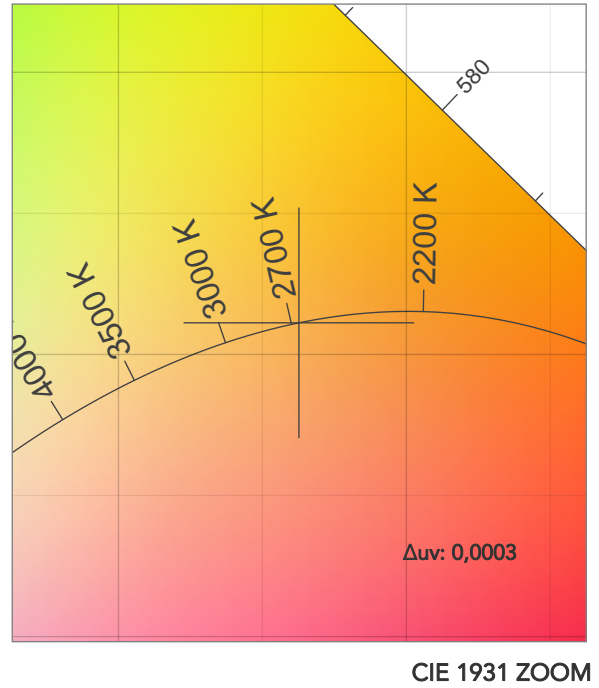
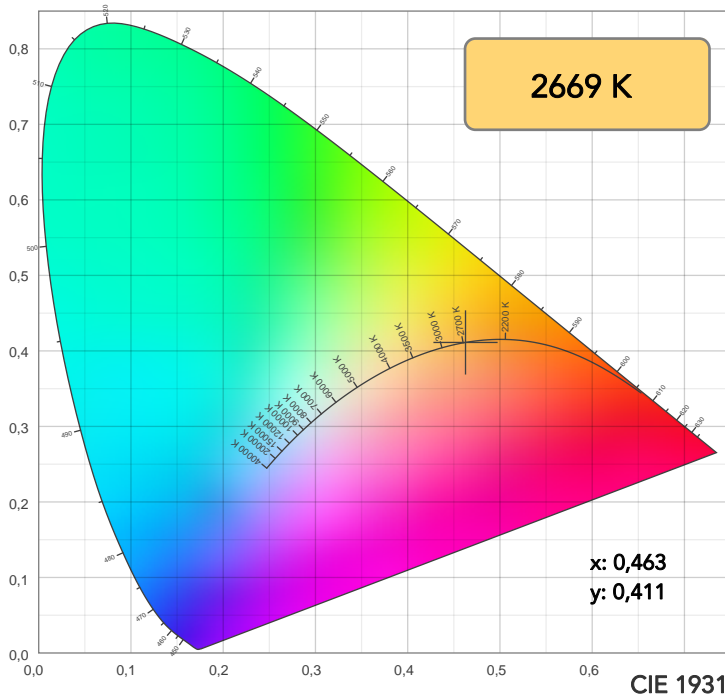
Beam angle 50%: 69,9°

Field angle 10%: 125,9°

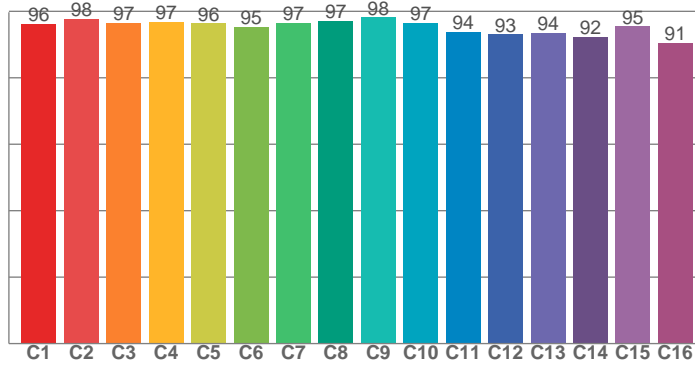
Cut off angle 2.5%: 155°

Spectra

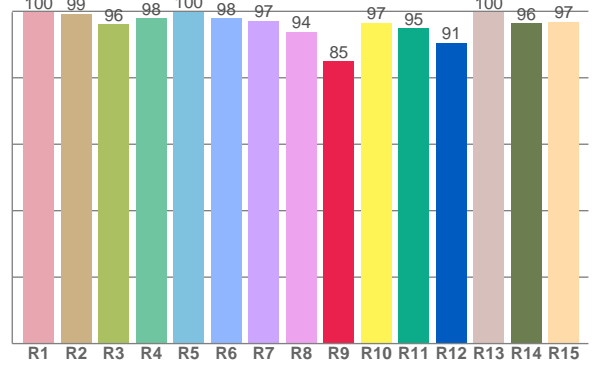




TM30: 95,5



CRI: 97,7 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
99,7	99,3	96,0	97,9	99,9	98,0	97,2	93,9	84,9	96,6	94,9	90,6	99,7	96,5	96,9

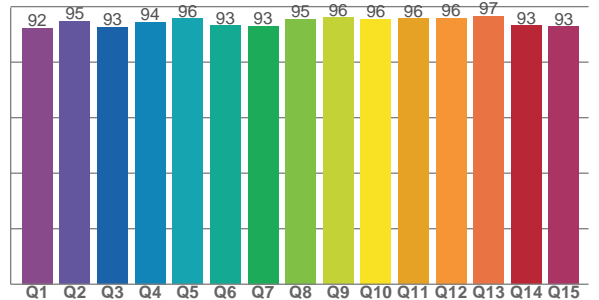
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96,3	97,8	96,6	96,8	96,4	95,3	96,5	97,2	98,2	96,6	93,8	93,1	93,5	92,2	95,5	90,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,3	94,7	92,5	94,4	95,7	93,1	93,0	95,5	96,1	95,5	95,7	95,9	96,5	93,2	92,8

CQS: 94,1



COLOR PARAMETERS

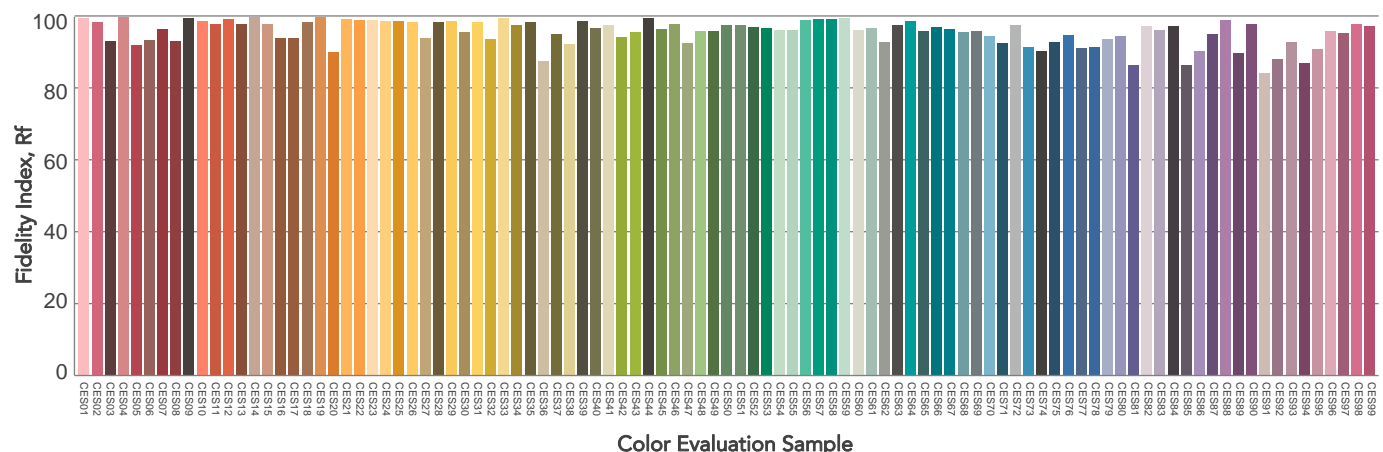
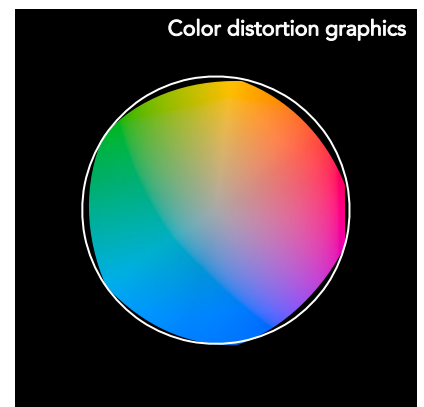
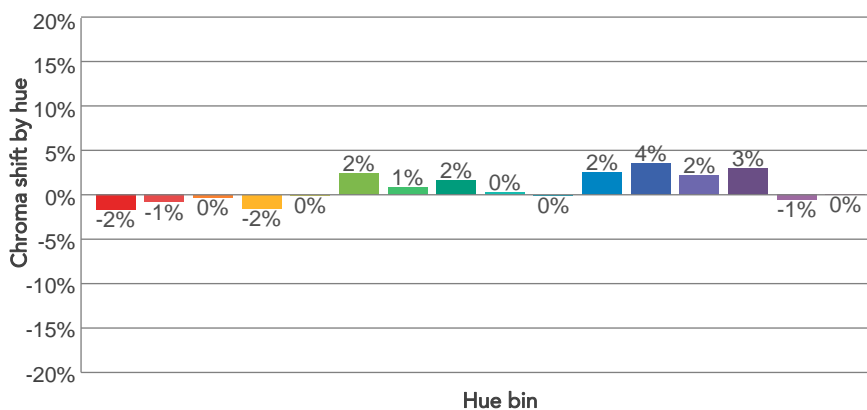
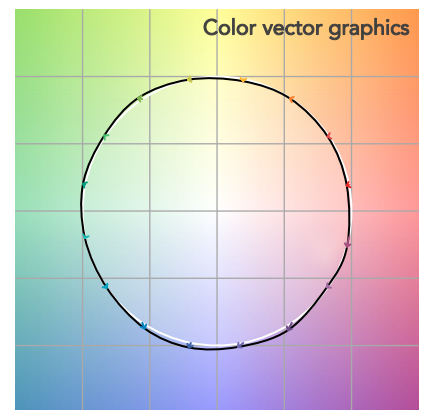
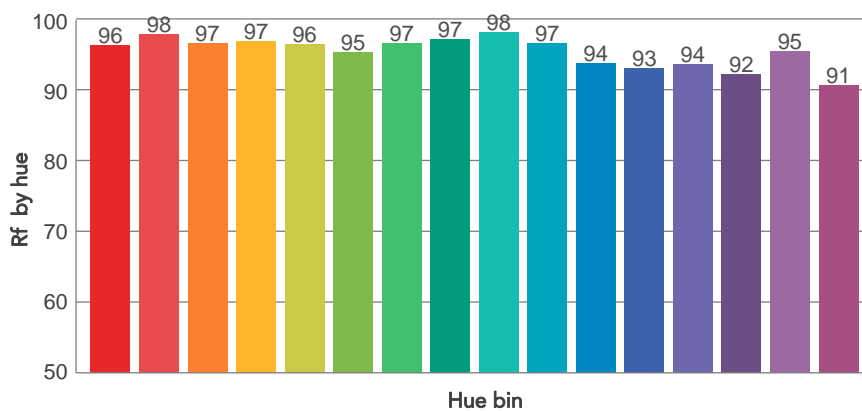
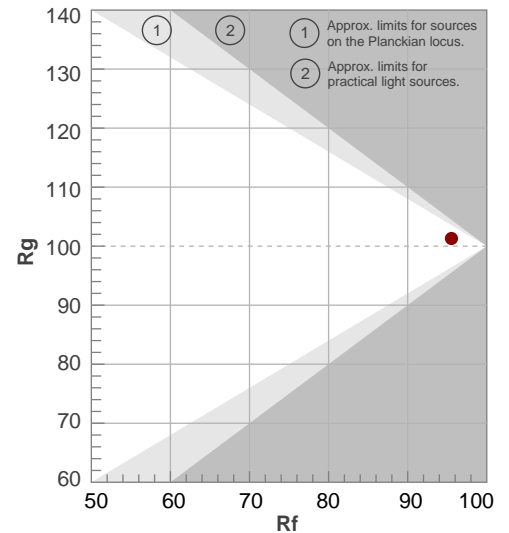
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2669 K	97,7	84,9	95,5	101,3	94,1	97	0,463	0,411	0,0003

TM30 DETAILS

Rf 95,5
Fidelity index Rf

Rg 101,3
Gammut index

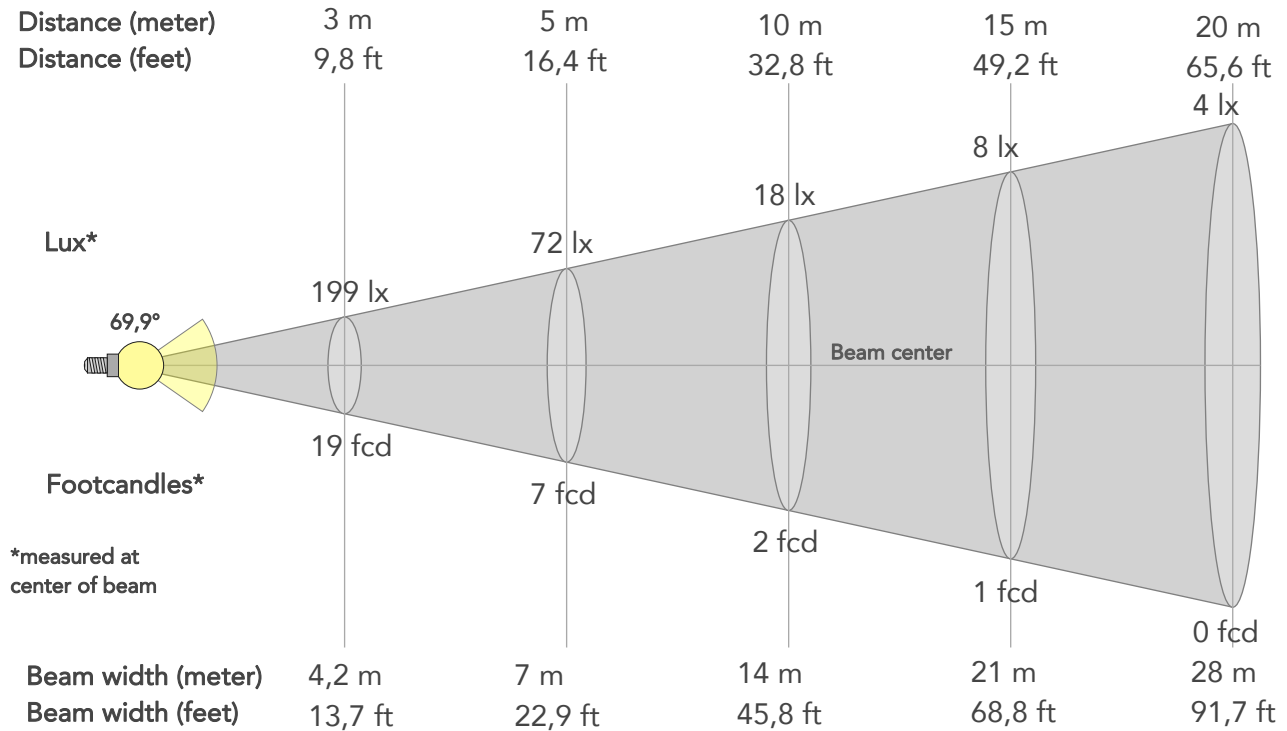
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	-2%	0%
2	98	-1%	0%
3	97	0%	1%
4	97	-2%	0%
5	96	0%	2%
6	95	2%	2%
7	97	1%	0%
8	97	2%	0%
9	98	0%	0%
10	97	0%	2%
11	94	2%	4%
12	93	4%	-1%
13	94	2%	-5%
14	92	3%	-5%
15	95	-1%	-2%
16	91	0%	-7%



BEAM DETAILS



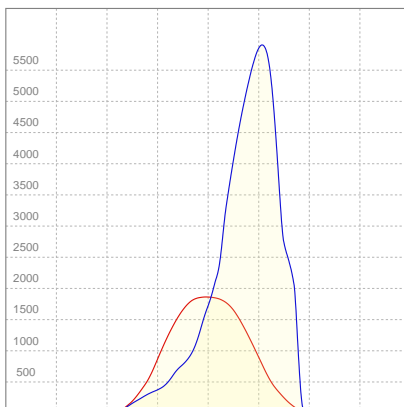
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
69,9°	125,9°	155°	78,1%	48,3%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	1792lx	448lx	199lx	112lx	72lx	32lx	18lx	8lx	4lx	3lx	2lx	1lx	1lx
Footcand.	167fcd	42fcd	19fcd	10fcd	7fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,8m	4,2m	5,6m	7m	10,5m	14m	21m	28m	34,9m	41,9m	55,9m	69,9m
Beam wid.	4,6ft	9,2ft	13,7ft	18,3ft	22,9ft	34,4ft	45,8ft	68,8ft	91,7ft	114,6ft	137,5ft	183,4ft	229,2ft

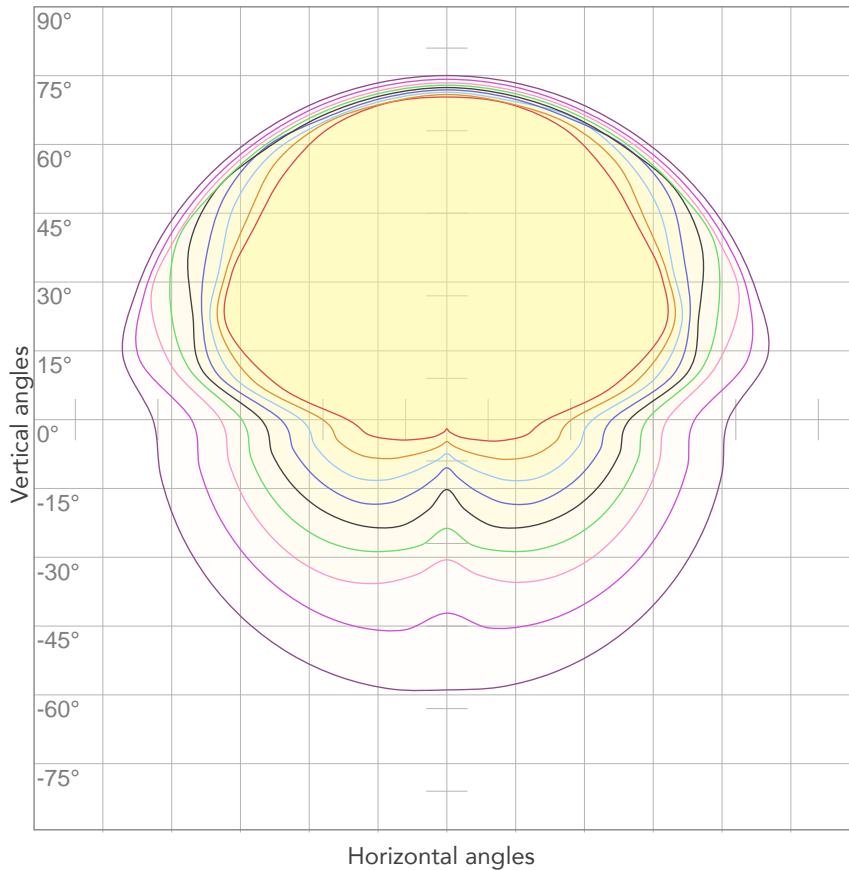
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,983A	208,8W	37lm/W
Power FC			
0,97			

ISO CANDELA DIAGRAM



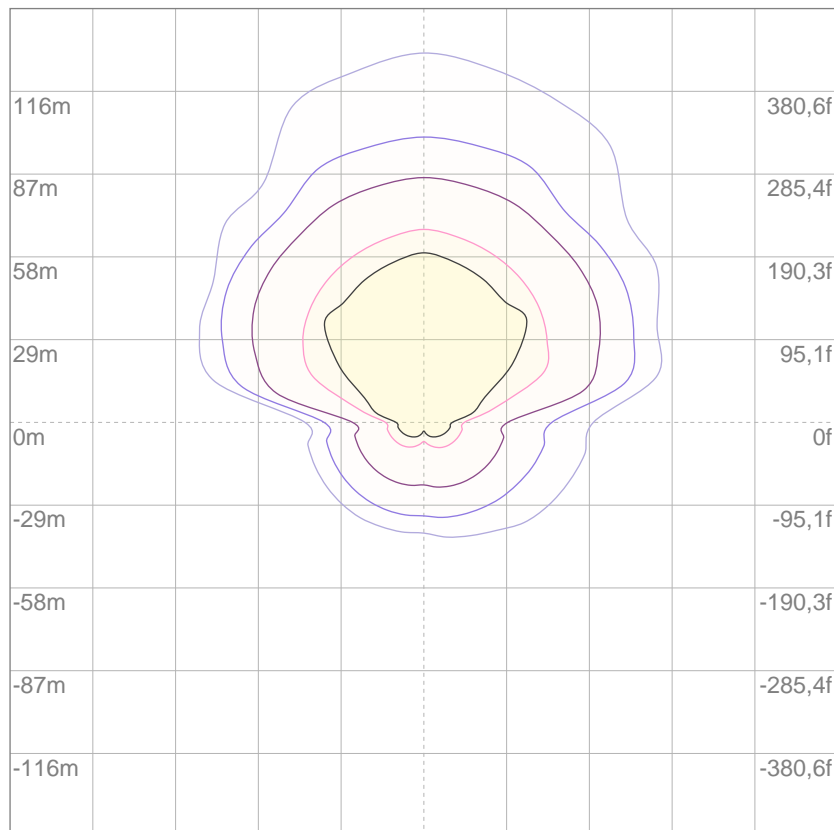
10%	179 cd
20%	358 cd
30%	538 cd
40%	717 cd
50%	896 cd
60%	1075 cd
70%	1255 cd
80%	1434 cd

Conditions:

Number of c-planes: 4

Candela at center: 1792 cd

ISO LUX DIAGRAM



3%	0,538 lx
5%	0,896 lx
10%	1,79 lx
30%	5,38 lx
50%	8,96 lx

Conditions:

Number of c-planes: 4

Lux at center: 17,9 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.